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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2008; month=3; day=13; hr=14; min=56; sec=57; ms=367;]

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Application No: 10551699 Version No: 2.0

Input Set:

Output Set:

Started: 2008-03-03 14:45:59.010
Finished: 2008-03-03 14:45:59.830
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 820 ms
Total Warnings: 12
Total Errors: 0
No. of SeqIDs Defined: 21
Actual SeqID Count: 21

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<130> 4982-4

<140> 10551699

<141> 2005-11-21

<150> PCT/EP04/50405

<151> 2004-04-01

<150> EP 03075974.0

<151> 2003-04-01

<160> 21

<170> PatentIn version 3.3

<210> 1

<211> 860

<212> DNA

<213> Beta vulgaris

<400> 1

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tgacatgtga atcagccatt caacttcgag aaaaaggtga agtgggtgtt ggagagacta 360

cccttaaata tttgggagct atccatttga agaatggagt gattgatccc cattttgagg 420

ttgtgaaaca agcattatttga agaaccataag aagaagcaag tggtgacaaa tggagtgaag 480

aattgaaatg tgcttggagt gttgcctatg atcaacttagc tgcaagccatc aaagctgaga 540

tgaaggaata ggttagcttag ttctcagtcg ccaaaagtat tactctaaaa atattgaata 600

aatattctta ttgttttga gggaaatta ttgttattgt tgattctgac tcacttattt 660

atccgagtga cttgatatgg tgcttttct tgccttatta ttgatttagca agaagggaaat 720

caaattcata attattgggt taaccatgtta atagtgcata ttaattgtga taaaaccttg 780

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860

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Ile Met Lys Gln Asn Ile Pro Glu Tyr Ser Leu Arg Phe Phe Ser Ile
20 25 30

Ile Leu Glu Ile Ala Pro Ala Ala Lys Asn Met Phe Ser Phe Leu Arg
35 40 45

Asp Ser Glu Glu Val Pro Gln Asn Asn Pro Lys Leu Lys Ala His Ala
50 55 60

Ile Lys Val Phe Lys Met Thr Cys Glu Ser Ala Ile Gln Leu Arg Glu
65 70 75 80

Lys Gly Glu Val Val Val Gly Glu Thr Thr Leu Lys Tyr Leu Gly Ala
85 90 95

Ile His Leu Lys Asn Gly Val Ile Asp Pro His Phe Glu Val Val Lys
100 105 110

Gln Ala Leu Leu Arg Thr Ile Glu Glu Ala Ser Gly Asp Lys Trp Ser
115 120 125

Glu Glu Leu Lys Cys Ala Trp Ser Val Ala Tyr Asp His Leu Ala Ala
130 135 140

Ala Ile Lys Ala Glu Met Lys Glu
145 150

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agcaagaagc ttttgtgaag gaatcgtggg agatactgaa acaagacatc cccaaataca	180
gccttcactt ctttcacag atactggaga tagcaccagc agcaaaaggc ttgttcttt	240
tcctaagaga ctcagatgaa gtccctcaca acaatcctaa actcaaagct catgtgtta	300
aagtcttcaa gatgacatgt gaaacagcta tacagctgag ggaggaagga aaggtggtag	360
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ctcacttcga ggtggtgaaa gaagcttgc taaggacatt gaaagagggg ttgggggaga	480
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acatgaatct attccacata catgatacac atatacgtgt ttctgtgtgt gtactatgtt	660
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agggagatac gtgatactgt agttcttctt gaaattgtta ttctgtgagaa atatcatgg	780
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<213> *Arabidopsis thaliana*

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20 25 30

Phe Ser Gln Ile Leu Glu Ile Ala Pro Ala Ala Lys Gly Leu Phe Ser
35 40 45

Phe Leu Arg Asp Ser Asp Glu Val Pro His Asn Asn Pro Lys Leu Lys
50 55 60

Ala His Ala Val Lys Val Phe Lys Met Thr Cys Glu Thr Ala Ile Gln
65 70 75 80

Leu Arg Glu Glu Gly Lys Val Val Val Ala Asp Thr Thr Leu Gln Tyr
85 90 95

Leu Gly Ser Ile His Leu Lys Ser Gly Val Ile Asp Pro His Phe Glu
100 105 110

Val Val Lys Glu Ala Leu Leu Arg Thr Leu Lys Glu Gly Leu Gly Glu
115 120 125

Lys Tyr Asn Glu Glu Val Glu Gly Ala Trp Ser Gln Ala Tyr Asp His
130 135 140

Leu Ala Leu Ala Ile Lys Thr Glu Met Lys Gln Glu Glu Ser
145 150 155

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<213> Brassica napus

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ccagcagcaa aggacatgtt ctcttccta agagacacag atgaagtccc tcataacaat 180
cctaaactca aagctcatgc ttttaaagtc ttcaagatga catgtgagac agcaatacag 240
ctgagggaga aaggaaaggt agtggtggt gacacaaccc tccaatactt gggctctgtt 300
catttcaaga gcggtgttct tgatcctcac tttgaggtgg taaaagaggc attggtgagg 360
acactgaaag aagggttggg ggagaagtac aatgaagaag tggaggagc ttggtccaag 420
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ccctaa 486

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<212> PRT
<213> Brassica napus

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20

25

30

Phe Ser Gln Ile Leu Glu Ile Ala Pro Ala Ala Lys Asp Met Phe Ser
35 40 45

Phe Leu Arg Asp Thr Asp Glu Val Pro His Asn Asn Pro Lys Leu Lys
50 55 60

Ala His Ala Val Lys Val Phe Lys Met Thr Cys Glu Thr Ala Ile Gln
65 70 75 80

Leu Arg Glu Lys Gly Lys Val Val Val Ala Asp Thr Thr Leu Gln Tyr
85 90 95

Leu Gly Ser Val His Phe Lys Ser Gly Val Leu Asp Pro His Phe Glu
100 105 110

Val Val Lys Glu Ala Leu Val Arg Thr Leu Lys Glu Gly Leu Gly Glu
115 120 125

Lys Tyr Asn Glu Glu Val Glu Gly Ala Trp Ser Lys Ala Tyr Asp His
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Leu Ala Leu Ala Ile Lys Ala Glu Met Lys Gln Glu Asp Ser Gln Lys
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Asp Tyr Lys Asp Asp Asp Lys
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Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
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<210> 17
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<212> PRT
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Glu Asp Gln Val Asp Pro Arg Leu Ile Asp Gly Lys
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<210> 18
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<210> 19
<211> 159
<212> PRT
<213> Gossypium hirsutum

<400> 19

Met Gly Phe Thr Glu Lys Gln Glu Gly Leu Val Lys Glu Ser Trp Glu
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Val Leu Lys Gln Asp Ile Pro His Ser Ser Leu Arg Phe Phe Ser Leu
20 25 30

Ile Leu Glu Ile Ala Pro Gly Ala Lys Asn Met Phe Ser Phe Leu Arg
35 40 45

Glu Ser Glu Glu Ile Pro Gln Asn Asn Pro Lys Leu Lys Ala His Ala
50 55 60

Val Lys Val Phe Lys Met Thr Cys Glu Ser Ala Ile Gln Leu Arg Glu
65 70 75 80

Lys Gly Glu Val Val Ala Asp Thr Thr Leu Lys Tyr Leu Gly Thr
85 90 95

Val His Val Lys Ser Gly Val Lys Asp Pro His Phe Glu Val Val Lys
100 105 110

Glu Ala Leu Leu Arg Thr Ile Glu Glu Ala Ile Gly Glu Glu Lys Trp
115 120 125

Asn Glu Glu Met Lys Asn Ala Trp Gly Glu Ala Tyr Asp Gln Leu Ala
130 135 140

Glu Ala Ile Lys Ala Glu Met Lys Asn His His Asp Glu Thr Ala
145 150 155

<210> 20
<211> 156
<212> PRT
<213> Lycopersicon esculentum

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Met Gly Phe Thr Asp Lys Gln Glu Ala Leu Val Arg Asp Ser Trp Glu
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Phe Met Lys Gln Asp Ile Pro Gln Leu Ser Leu Arg Phe Phe Ser Leu
20 25 30

Ile Leu Glu Ile Ala Pro Val Ala Lys Asn Met Phe Ser Phe Leu Lys
35 40 45

Asp Ser Asp Glu Leu Pro Glu Asn Asn Pro Lys Leu Arg Ala His Ala
50 55 60

Val Lys Val Phe Lys Met Thr Cys Glu Ser Ala Ile Gln Leu Arg Glu
65 70 75 80

Lys Gly Glu Val Val Gly Glu Thr Thr Leu Lys Tyr Leu Gly Ser
85 90 95

Ile His Leu Gln Lys Arg Val Ala Asp Pro His Phe Glu Val Val Lys
100 105 110

Glu Ala Leu Leu Arg Thr Val Lys Glu Ala Thr Gly Asn Lys Trp Lys
115 120 125

Asp Glu Met Lys Glu Ala Trp Ser Glu Ala Tyr Asp Gln Leu Ala Ser
130 135 140

Ala Ile Lys Ala Glu Met His Ala Glu Ala Ala Ala
145 150 155

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<213> Casuarina glauca

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Val Leu Lys Gln Asn Ile Pro Ala His Ser Leu Arg Leu Phe Ala Leu
20 25 30

Ile Leu Glu Ala Ala Pro Glu Ser Lys Tyr Val Phe Ser Phe Leu Lys
35 40 45

Asp Ser Asn Glu Ile Pro Glu Asn Asn Pro Lys Leu Lys Ala His Ala
50 55 60

Ala Val Ile Phe Lys Thr Ile Cys Glu Ser Ala Thr Glu Leu Arg Gln
65 70 75 80

Lys Gly His Ala Val Trp Asp Asn Asn Thr Leu Lys Arg Leu Gly Ser
85 90 95

Ile His Leu Lys Asn Lys Ile Thr Asp Pro His Phe Glu Val Met Lys
100 105 110

Gly Ala Leu Leu Gly Thr Ile Lys Glu Ala Ile Lys Glu Asn Trp Ser
115 120 125

Asp Glu Met Gly Cys Ala Trp Thr Glu Ala Tyr Asn Gln Leu Val Ala
130 135 140

Thr Ile Lys Ala Glu Met Lys Glu
145 150